

2013 UDOT RESEARCH PROBLEM STATEMENT

*** Problem statement deadline is March 25, 2013. Submit statements to Steve Bagley at sbagley@utah.gov ***

Problem Title: SMA Friction Values

No. :UT-13.06.06

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UDOT Champion (suggested):

Select a Subject Area

☐ Materials/Pavements

☐ Maintenance

☐ Traffic Mgmt/Safety

☐ Geotechnical

☐ Preconstruction

☒ Planning/Asset Mgmt

☐ Transportation Innovation

1. Describe the problem to be addressed.

We have been seeing some skids tests on our SMA surface that has given us some cause for concern. New pavements with low numbers and old pavements with high numbers and visa versa. We would like to see if we have a cause for concern because the SMA may be wearing too fast.

2. Describe why this research is important and how it is unique.

SMA is a surface treatment that we use a lot because of its toughness and durability. As of late, we have seen some skid test data that may indicate that some of our SMA is not performing as advertised. In order to assess the condition of our SMA, we would like to do some in depth skid testing and make a comparison of the old to the new and see if we do have a problem.

3. List the research objective(s) to be accomplished:

1. Is our SMA wearing too fast?
2. Are we placing the SMA properly?
3. Are there recent placements that need to be fixed?

4. List the major tasks to accomplish the research objective(s):

1. Do skid testing on all of our SMA placements and compare the data.
2. Determine if we do have some places that need improvement.
3. Compare placement methods to see if they may be a potential cause for any problems

5. List the deliverable(s) to come to UDOT from this research study:

1. Skid data for all SMA placements
2. A map of all SMA placements
3. Dates of all placements

6. Describe how the results of this study will be implemented at UDOT.

Information will be used to affirm our use of SMA and make corrections or repairs where necessary, in addition to giving us a clearer picture of the condition of our pavements.

7. Estimated cost - Total: \$30,000

UDOT Share: \$

Other/Matching Funds: \$

8. Outline the proposed schedule for this study, including estimated start date, duration, and major event dates.